

REMARKS

Claims 1-39 are pending and at issue in the application. Claims 1, 20, 24 and 35 are independent. Claim 35 is amended to recite the limitations of claim 38. Claim 38 is accordingly cancelled. Claim 40 is added to recite a first process plant and a second process plant disparate from the first process plant. Claim 41 is added to recite that a first processing plant comprises first equipment necessary to carry out a first industrial process and a second processing plant comprises second equipment necessary to carry out a second disparate industrial process. No new matter is added by these amendments.

In response to the Examiners' request for clarity of a process plant, Applicants submit that a plant is equipment, including machinery, tools, instruments, and fixtures and the building containing them, necessary for an industrial or manufacturing process or operation (see American Heritage Dictionary). Thus, a plant is defined by its particular process or operation. The equipment necessary for an industrial or manufacturing process generally includes a process control system. Generally, a process control system comprises a set of workstations, process controllers, devices, etc. As seen from page 1, lines 9-25 of the pending application, a plurality of workstations, controllers, and devices comprise the process control system of a process plant, and this equipment is interdependent and interrelated within the process of the particular plant. Further, while the process of the first processing plant may comprise a plurality of interrelated controllers, workstations, and devices, the process of the first plant is different and disparate from any process of the second processing plant.

Applicants respectfully traverse the rejection of claims 1, 4, 7-11, 14-18, 35, and 36 under 35 U.S.C. §102(e) as anticipated by McIntyre (U.S. Patent No. 6,813,587). Each of the independent claims recites a first process plant, a second process plant, and a server, where each of the first and second process plants and the server are coupled to an open network, and where the server analyzes information originated by devices of the process plants and makes the results available via the open network, for example, to the first and second process plant, or to a remote user interface. The recited language of a first processing plant and a second processing plant indicates an inherent distinction and separation between

the first and the second plants, and consequently, an inherent distinction between a first and a second process of the first and second plants, respectively.

McIntyre does not disclose two distinct and separate processing plants where both processing plants are connected to an open network. In fact, McIntyre only discloses a single process plant under the control of a single, albeit distributed, process control system.

FIG. 1 shows, by way of example, an application physically deployed to two application server computers 100 and 102. Alternatively, an application is presented to users by visually depicting the role of application objects in carrying out supervisory process control and/or extracting manufacturing information according to the application. Turning now to FIG. 10 ***a plant process application is depicted, in a plant model,*** according to the roles of application objects ***in the plant process.*** This illustrative example is scaled down for purposes of illustratively depicting an exemplary embodiment of the invention. (emphasis added) Col. 18, lines 40-50.

Generally, McIntyre discloses software that may be implemented on a process control system for designing and distributing instructions, such as process control instructions throughout the process control system (i.e., to a plurality of interconnected process controllers and/or workstations). As discussed above, a process control system comprises interrelated control components, and the McIntyre distribution system is directed to allowing a developer to implement software on control components. Given that a process control system of a process plant is part of the process that defines the process plant (as discussed above), a process control system including a plurality of interrelated controllers, workstations, etc. as disclosed in McIntyre indicates only a single process and thus, only a single plant, and not multiple plants. McIntyre itself discloses that its multiple equipment areas correspond to a single process plant, not multiple process plants, as recited by the pending claims.

A "plant centric" application model enables a system developer to build an application model in a logical way. The system developer defines the individual devices and functions as distinct entities ***within a plant.*** All associated functionality is contained in each object. After defining the individual objects

within the plant, the user **configures (assembles) associations between the objects**. (emphasis added) Col. 5, lines 18-24.

While the above-described process line depicted in FIG. 10 is simple, and thus relatively easy to follow, in most cases ***processes are very complex and include hundreds and even thousands of distinct, sensors and controlled components***. In such instances, the application objects corresponding to the sensors and controlled ***components are logically grouped within areas***. (emphasis added) Col. 19, lines 11-16.

Turning to FIG. 11, logical grouping of ***related process components*** of FIG. 10 ***into areas*** is demonstrated. The revised process illustration depicts the system as ***a series of areas*** comprising logically grouped controlled process components.... The set of sub-areas are grouped under ***a single process plant area*** 1120. (emphasis added) Col. 18, lines 53-67.

From the above descriptions, it is clear that McIntyre is directed to controlling equipment of a single process plant, particularly given that the components of the single plant are controlled by a single control system to coordinate the related processes. Moreover, while McIntyre discloses multiple components influencing multiple portions of a plant process, these components still belong to the same overall process and to a single plant. In particular, while a plant process may be conceptualized to include a plurality of components, each component of a plant is dependent and interrelated to other components of the same plant.

Further, none of the passages cited by the Office action disclose first and second processing plants. In particular, the Office action cites Col. 1, lines 29-36 and Col. 7, lines 21-26 for a data processing system having more than one process plant connected to an open network. For convenience, these sections are reproduced below:

The present invention generally relates to the field of computerized process control networks. More particularly, the present invention relates to supervisory process control and manufacturing information systems. Such systems generally execute above a control layer in a process control network to provide guidance to lower level control elements and/or field

devices such as, by way of example, programmable logic controllers. Col. 1, lines 29-36.

In the exemplary system embodying the present invention, the multi-layered application comprising portions 104 and 106 is communicatively linked to a controlled process. In particular, the first application server personal computer 100 is communicatively coupled to a first programmable logic controller 112, and the second application server personal computer 102 is communicatively coupled to a second programmable logic controller 114. It is noted that the depicted connections from the PCs 100 and 102 to the PLCs 112 and 114 represent logical connections. Such logical connections correspond to both direct and indirect physical communication links. For example, in a particular embodiment, the PLC 112 and PLC 114 comprise nodes on an Ethernet LAN to which the personal computers 100 and 104 are also connected. In other embodiments, the PLCs 112 and 114 are linked directly to physical communication ports on the PCs 100 and 102. Col. 7, lines 10-26.

The first passage merely describes process control systems including controllers and field devices. The second passage further details how the workstations (PCs 100 and 102) of a single process plant are coupled to a controller (PLC 112 and 114) via an Ethernet LAN. To the best understanding of the Applicants, the Office action appears to cite the controllers as different process plants. However, as discussed above, these are known elements of a process control system of a single plant. To the extent McIntyre discloses a supervisory system (cited in the action as the recited data processing system), the supervisory system only communicates with the components of the process control system of a single plant, not multiple plants. These passages do not disclose a first process plant and a second distinct and separate process plant connected to an open network. Because all the components of the McIntyre system are disclosed as part of one plant and influence a process or a set of interrelated components of the same plant, these components are not a part of a second plant or a second process defining a second distinct and separate plant, as recited by the pending claims.

Furthermore, neither the centralized monitoring system (cited in the action as the recited primary server) nor the data access servers (cited in the action as the recited primary data historian) are adapted to receive, store, or generate analysis results based on

process control information from first and second process plants, because McIntyre fails to disclose, teach, or otherwise suggest that any of its components could be or should be configured to communicate or process data from both a first process plant and from a disparate second process plant. For example, when a first plant is a confectionary plant and a second plant is a oil distillation plant, disparate machinery and disparate data may exist. McIntyre does not disclose how any devices of its plant may be connected to devices of a second plant, much less disclose receiving process control information from a second plant or how to process disparate data generated by two different plants. To the extent the monitoring system and servers of McIntyre receive process control information, they are only adapted to do so for a single, particular plant. Indeed, processing disparate data from two different plants is not a trivial matter as data format, communication protocols, processing algorithms and other software differences must be addressed. Further, because control information is specific to a particular plant and McIntyre fails to even teach communication with a first plant and with a second plant disparate from the first plant, one skilled in the art would not obtain from McIntyre any motivation to modify McIntyre to communicate control information from both a first plant and a second plant. Therefore, McIntyre does not anticipate any of the pending claims.

While Applicants submit that the previously entered claim language of each of independent claims 1, 20, 24, and 35 clearly recites a distinction between a first processing plant and a second processing plant, claim 40 is added herein to more clearly recite a second processing plant *disparate* from a first processing plant. Applicants submit that this amendment is made merely to clarify the existing scope and meaning of the claims as the previously entered claims already include a distinction between a first processing plant and a second processing plant. In particular, the word “disparate,” codifies the meaning of fundamentally different and incongruous elements. Because McIntyre discloses that its plurality of equipment control related processes of a single process plant, McIntyre does not disclose incongruous or independent processes and therefore does not disclose a first processing plant disparate from a second processing plant, as specifically recited by claim 40.

Further, in light of the Examiner’s interview, Applicants have added claim 41 which recites a first processing plant comprising first equipment necessary to carry out a first industrial process and a second processing plant comprising second equipment necessary to

carry out a second disparate industrial process. Applicants submit that the previously entered claim language of each of independent claims 1, 20, 24, and 35 clearly recites a process plant and that the recited process plant already includes the limitations of claim 41. Because McIntyre does not disclose incongruous or independent industrial processes, McIntyre does not disclose a first processing plant comprising first equipment necessary to carry out a first industrial process and a second processing plant comprising second equipment necessary to carry out a second disparate industrial process, as specifically recited by claim 41.

Applicants respectfully traverse the rejection of claims 2, 3, 5, 6, 20-34, and 39 as obvious over any combination of McIntyre, Agrusa, and Funkhouser. Each of the independent claims recites a first process plant, a second process plant, and a server, where each of the first and second process plants and the server are coupled to an open network, and where the server analyzes information originated by devices of the process plants and makes the results available to the first and second process plants via the open network. As discussed above, McIntyre does not disclose a second processing plant disparate from a first processing plant. None of Agrusa or Funkhouser discloses two or more processing plants connected to an open network, nor are Agrusa or Funkhouser cited for this limitation. Therefore, no combination of the McIntyre, Agrusa, and Funkhouser can render claims 2, 3, 5, 6, 20-34, and 39 obvious.

Applicants further traverse the rejection of claim 6 as obvious over McIntyre, Agrusa, and Funkhouser. Claim 6 recites that a first process plant is associated with a first business entity and a second process plant is associated with a second business entity. McIntyre discloses a single plant and does not disclose two business entities each associated with different plants. The Office action asserts that because McIntyre discloses conducting business transactions in a distributed manner, that McIntyre reads on the claimed limitation. However, merely conducting business transactions does not automatically imply that the plant in McIntyre relates to two different plants or that a second, different business entity also involved in the transaction relates to a second plant, much less a second plant coupled to a server via an open network as recited in the pending claims. Generally, a plant operates with respect to a particular business, and thus, functions of the plants may be considered business functions. However, the claims recite a first business entity of a first plant and a second business entity of a second plant. McIntyre fails to disclose more than one plant, much less

more than one business entity each associated with two disparate plants. For this further reason, McIntyre does not render claim 6 obvious.

CONCLUSION

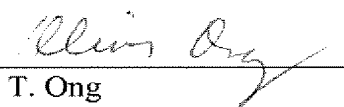
For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejections and allowance of claims 1-37 and 39-41. Submitted herewith is a petition for extension of two months time and the corresponding extension of time fee. While Applicants believe that no other fees are due, the commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required to Deposit Account No. 13-2855.

If there are matters that can be discussed by telephone to further the prosecution of this application, Applicants respectfully request that the Examiner call its attorney at the number listed below.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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